

Enhancing Real Time Information Delivery to Small-holder Farmers in Africa and South Asia through Community Knowledge Workers

1. THE CONCEPT

During the site visits to Asia and Africa regions, the WorldAgInfo project Design Team members observed that the information delivered by the government run extension system does not reach smallholders at the village level. This impacts the adoption (or non-adoption) of crop management practices by small holder farmers such as adoption of improved seeds, pest management practices and other farm management practices, etc. The concept presented here addresses this constraint by building a large cadre of “Community Knowledge Workers” to be placed at the “Village Knowledge Centers” to effectively work with smallholders in providing real-time information on production technologies/practices through the use of both conventional methods and through the emerging tools of ICTs.

2. RATIONALE AND EVIDENCE THE PROJECT CAN BE SUCCESSFUL

The major producers of knowledge and information related to production agriculture for small holders in Africa and South Asia are public agricultural research systems (agricultural universities, public research institutes, public extension systems, etc.). However, the link and information flow between the producers of knowledge and smallholder farmers is often weak due to inefficient and underfunded extension systems. Private sector fills the gap only in commercial crops and regions, and the NGOs often work on specific projects and time-limited projects and activities. Evidence suggests that in the absence of an effective extension system the prominent source of information for farmers is progressive farmers within village community. This proposed concept is based on the premise that empowering “knowledge workers” who are part of the village community can effectively fulfill the gap in the transfer of critical knowledge/information pertaining to production agriculture to smallholders.

3. EXPECTED BENEFITS OF THE PROJECT INCLUDING COMMENTS ON SUSTAINABILITY AND SCALE

Over the five year period, this project will create a pool of well trained 500 “community knowledge workers” (CKWs) in South Asia and 500 in Africa. These well trained CKWs will be housed at the Village Knowledge Centers (VKCs). The VKCs will be linked to various stakeholders including agricultural colleges/universities, private sector (local banks, input dealers), NGOs, government supported research and extension/outreach systems. The support from Bill and Melinda Gates foundation will be used to train 1000 CKWs and as a start-up capital (endowment) of \$5,000 for establishing 1,000 Village Knowledge Centers, each serving 10 villages (with a target of serving 10,000 villages in total in Africa and South Asia). Through the support provided by this proposed concept, it is expected that 1.5 million farm families in South Asia and 0.5 million farm families in Africa will benefit as a result of real time information delivery on the use of production technologies/practices such as locally adapted improved seeds, Integrated Pest Management (IPM) and other farm management practices.

The trained CKWs will be employed by VKCs through: 1) the income generated from the initial endowment, 2) contributions from local community members and fee-based services, 3) matching grants from governments and 4) voluntary contributions and support from stakeholders serving the community (i.e., private sector, NGOs, other donor agencies). For sustainability and scale purpose, the goal would be to make these VKCs operate 100% on the

first three sources of financial support over the five year period. The specific nature of the type and size of support from all these sources would have to be carefully determined and included in the business planning and implementation documents to suit conditions in each country/region.

4. HOW THE PROJECT WILL TARGET THE NEEDS AND BE OF SPECIFIC BENEFIT TO WOMEN SMALLHOLDERS

Community Knowledge Workers to be trained by this project will be selected in consultation with the local village leaders and representatives of the village communities. A gender balance will be considered while selecting the CKWs and while designing the curriculum and training programs for CKWs. The CKWs will be trained at regional centers such as secondary/post-secondary education centers (colleges, polytechnics, etc.). The training programs will be developed in consultation with local agricultural universities, Departments of agriculture and with active input from the private sector, NGOs, and extension system. Timely access and availability of good quality seeds, planting procedures, and pest management practices are important components of farm management that have significant impacts on smallholder productivity and agricultural sustainability. Thus, the initial focus of the training programs will be on two key aspects of crop production agriculture—seeds and pest management. In the long term, the skills and knowledge of these CKWs can be upgraded to include comprehensive training in other aspects of farm management (as need and opportunities arise).

In South Asia, this project will focus on (all or a sub-set of) six states that have been identified by the Gates Foundation as priority states for reducing poverty. In Africa, the countries will be selected in consultation with the assessments done by the Gates Foundation. The criteria for selecting villages within these countries/states will include: potential for buy-in of this concept from local communities and governments, community need as reflected in the size of land holdings, number of households, income levels and crop production constraints, and potential for the involvement of women as CKWs and in VKCs, etc.

The knowledge workers to be trained may include retired teachers, extension workers, part-time farmers or farm workers, with a minimum educational level of high school certificate. A requirement will be that the CKW be a resident of one of the village clusters to be targeted.. The training program will take place in both classroom and on-farm settings. The duration of training program may vary from short-term training to season-long practical training which would cover the entire crop management cycle and will include hand-on practical approaches through experiential learning. This training curricula and project activities will build on experience and successful technologies related to seeds and IPM that are relevant to Africa and South Asia, generated by national and international research/extension systems, NGOs and private sector (e.g., IPM CRSP, CGIAR, AGRA, FAO, etc.).

Once the appropriate training is provided, the knowledge workers will be placed at the village knowledge centers to implement the information delivery systems for smallholder farmers living in the cluster of villages targeted by the VKC. The Village Knowledge Centers will be an independent rural based organizations—run and managed by community knowledge workers with voluntary support and advisory committee of village leaders and stakeholders (e.g., universities, extension agents, local banks, private input dealers, NGOs). The structure

and organization of VKCs will have to be carefully worked out based on the legal framework of a given country/state, and with due consideration of gender balance.

At each VKC, the CKW will serve as the focal point for linking the formal research, education and extension systems with the smallholder farmers, and for generating new set of knowledge and information to address local needs. The community knowledge workers will deliver appropriate information to smallholder farmers through on-farm demonstrations, one-on-one advice, group meetings and through local media such as rural radios, cell phones, videos. The programs designed and implemented by VKCs will consider gender balance and incorporate feedback mechanisms to seek active input of small holder farmers. In addition, the CKWs will facilitate knowledge and information sharing by other relevant stakeholders from government, universities, NGOs and private sectors and progressive farmers.

5. PROJECTED COSTS OF THE PROJECT

A detailed business plan will be developed for the establishment, operation and sustainability of the Village Knowledge Centers and the Training programs for CKWs. It is estimated that this project would cost U.S. \$8 million as detailed below over a five-year period.

- Training program development (content, curricula, translation): \$1,000,000
- Training of 1000 CKWs: \$1,000,000
- Establishment of VKCs (1000 centers x \$5000): \$5,000,000
- Project management (travel, operational support, supplies, monitoring and evaluation): \$1,000,000

The activities in Africa and South Asia will be operated by an independent organization based in these regions, in collaboration with U.S. based institutions with global network and experience in working with countries in Africa and South Asia.

6. MEASURES OF SUCCESS

Monitoring and evaluation will be an integral part of this project. The following indicators will be used to measure the success:

- Number of training modules developed for CKWs
- Number of knowledge workers trained
- Number of VKCs established and become operational in 5 year period.
- Amount of external resources leveraged by the VKCs and CKWs
- Level of adoption by smallholders of new seeds and IPM practices
- Increase in farm productivity and income of smallholder farmers

7. RISKS

The risks that could inhibit the success of the project include:

- Political instability may impede the operation and sustainability of VKCs.
- Retention of trained CKWs in rural areas (education may bring mobility and opportunities for these CKWs outside rural areas)
- Lack of rural infrastructure may impede the use of modern ICT tools for VKCs
- Cultural sensitivity may limit the role of female CKWs and the involvement of female community members in VKCs.

